

REMARKS

Rejections Under 35 USC § 112

Claims 6 and 8 were rejected under 35 USC § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and claim the subject matter of the invention. Specifically, in Claim 6, the phrase "10 microns, +/-5 microns" is allegedly confusing and cannot be understood. Applicants submit that one skilled in the art would clearly understand that phrase to refer to a particle range of about 5 to about 15 microns. Claim 8 has been amended to change the phrase "the total weight" to --the weight percent--, for which there is proper antecedent basis.

Claim 1 has been amended to recite that the electrodepositable resin is at least 50 percent acrylic. The examples provide clear support for such an electrocoat composition. Claim 1 has also been amended to recite that the solid particulates polyacrylate is insoluble; support for this is found at page 6, lines 15-17.

Claims 46-60 have been added to reflect the embodiment of original Claim 2, now canceled. It is submitted that no new matter is added with the claim amendments/additions made above.

Claim Rejections Under 35 USC §§ 102 and 103

Claims 1, 3, 4, 9 and 25-27 were rejected under 35 USC § 102(b) as allegedly being clearly anticipated by Freese et al. (U.S. Patent No. 4,536,525). Claims 5-8, 14-17 and 28-31 were rejected under 35 USC § 103(a) as allegedly being unpatentable over Freese. These rejections are respectfully traversed.

Freese is cited as allegedly anticipating and/or rendering obvious the present invention. Freese appears to teach a cationic amine resin that may contain powdered polyacrylate. Freese does not anticipate, teach or suggest the use of insoluble solid particulate polyacrylate in an electrocoat resin that is at least 50 percent acrylic. Indeed, that an acrylate particle would lower the gloss in an acrylic resin is a surprising result that would not have been remotely obvious based upon the teachings of Freese.

Claims 1-31 were rejected under 35 USC § 103(a) as allegedly being unpatentable over GB 2074578 A in view of either Savin (U.S. Patent No. 5,792,803) or Housel et al. (U.S. Patent No. 5,880,250). This rejection is respectfully traversed.

GB '578 appears to be cited as teaching fusible solid thermosetting resin powder of the type used in powder coatings in an electrodeposition coating composition. The thermosetting powder resin is preferably used in an amount of 50 to 100 percent by weight based on the cationic binder resin. Thus, the thermosetting resin powder and curing agent therefore are themselves sufficient to form a film. In contrast, the present invention teaches the use of solid polyacrylate and/or solid particulate aliphatic polyurethanes/polyurea copolymer as an additive for reducing the gloss in an electrocoat composition. The present additives are not film-forming, as is the thermosetting resin used in GB '578. Accordingly, one skilled in the art would not have been motivated to look at the GB '578 and combine it with any reference to arrive at the present invention.

Claims 1, 3-19, 21-31, 38, 40 and 45 were rejected under 35 USC § 103(a) as allegedly being unpatentable over Tsuchiya et al. (U.S. Patent No. 4,975,475). This rejection is respectfully traversed.

Tsuchiya appears to teach the use of polymer microparticles in an electrodeposition coating wherein the solubility parameters of the particle and the resin differ by 1.0 or less. Such a differential would indicate to one skilled in the art that the particles are actually soluble in the resin; in contrast, most of the presently rejected claims (Claims 1, 3-17, 25-31 and 45) recite an insoluble solid particulate polyacrylate. Claims 18, 19 and 21-24 are directed to an electrocoat paste; Tsuchiya is silent as to the preparation of such a paste. Tsuchiya is also silent as to the method of Claims 38 and 40; achieving such sedimentation rate in an electrocoat composition is a significant achievement neither taught nor suggested by the art, and not achievable by mere process optimization.

NEW CLAIMS

All of the newly added claims (46-67) are directed to the embodiment of the present invention in which a solid particulate aliphatic polyurethane/polyurea

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copolymer is used. Neither Claim 2 nor Claim 20, which specifically recite such a particle, were rejected under either Freese or Tsuchiya. GB '578 is distinguishable for the reasons given above. Thus, it is submitted that Claims 46-67 are allowable.

SUMMARY

For the reasons give above, it is submitted that the present invention is allowable over the art of record. A Notice of Allowance is therefore respectfully requested at an early date.

Respectfully submitted,

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